

IN THE SPECIFICATION

Please replace the paragraph beginning at page 13, lines 10 through page 14, line 5, with the following rewritten paragraph:

The Mn molar ratio b_0 in formula [1] is a factor which has a decisive influence on selection of red light emission or white light emission. When b_0 is 0, no red peak is obtained to give only a blue or blue-green peak. However, when b_0 takes a small positive number, a red peak appears in blue and green peaks to give white light emission as a whole. When b_0 takes a larger positive number, blue and green peaks almost disappear to mainly give a red peak. The range of b_0 is $0 < b_0 \leq 0.7$ as a red phosphor or a white phosphor. It is conceivable that the phosphor receives irradiation of an excitation light source to excite Eu^{+2} , and that the energy of Eu^{+2} excited thereby transfers to Mn^{+2} , which emits red light. The degree of energy transfer somewhat differs mainly according to the composition of M^{10} and M^{20} , so that the boundary value of b_0 at which the red phosphor is changed to the white phosphor somewhat differs according to the composition of M^{10} and M^{20} . Accordingly, the good ranges of b_0 for red light emission and white light emission can not be strictly distinguished. However, it is preferably $0 < b_0 \leq 0.2$, and more preferably $0.02 \leq b_0 \leq 0.2$, as the white phosphor, and it is preferably $0.05 \leq b_0 \leq 0.7$, and more preferably $0.1 \leq b_0 \leq 0.6$, as the red phosphor.

Please replace the paragraph beginning at page 78, line 15 through page 79, line 14, with the following rewritten paragraph:

Example C-1

An aqueous solution of $\text{Ba}(\text{NO}_3)_2$, an aqueous solution of $\text{Mg}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$, an aqueous solution of $\text{Eu}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$, an aqueous solution of $\text{Mn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ and a

suspension of colloidal silica (SiO_2) (the molar ratio of $\text{Ba}(\text{NO}_3)_2$, $\text{Mg}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$, $\text{Eu}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$, $\text{Mn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ and SiO_2 is 0.935:0.935:0.1:0.03:1) were mixed in a platinum container and dried. Then, the mixture was burnt by heating under a stream of nitrogen gas containing 4% of hydrogen at 1050°C for 2 hours to produce a phosphor $\text{Ba}_{0.935}\text{Mg}_{0.935}\text{Eu}_{0.1}\text{Mn}_{0.03}\text{SiO}_4$ (phosphor used in a second light emitter). An emission spectrum at the time when this phosphor was excited at 400 nm, a main wavelength in an ultraviolet light region of a GaN-based light emitting diode, was measured. The wavelength of an emission peak thereof, the intensity of the emission peak at the time when the intensity of an emission peak of Comparative Example C-5 described later is taken as 100 (hereinafter referred to as the relative intensity), and the half-value width are shown in Table 9. This reveals that this phosphor emits strong red light giving high color rendering properties because of its sufficiently high intensity and wide half-value width, and that it emits bright deep red light, because the wavelength of emission peak is in the region of 615 nm to 645 nm. According to measurement of an excitation spectrum at a peak wavelength of 630 nm ~~in~~ ~~excitation at 400 nm~~, relative intensities at excitation wavelengths of 254 nm, 280 nm, 382 nm and 400 nm are 208, 328, 351 and 320, respectively, and light emission by excitation at around 400 nm is strong 1.5 times or more the conventional light emission by excitation at 254 nm. This shows that this phosphor is a phosphor which is very advantageous to a light source of a GaN-based semiconductor.

Please replace the paragraph at page 93, lines 12-18, with the following rewritten paragraph:

Industrial Applicability

According to the present invention, there can be provided a high-efficiency red light emitting phosphor and white light emitting phosphor for using in a display or lighting which

high-efficiently emits light in combination with a light source which emits light in the region from near-ultraviolet light to visible light.

Please replace the Abstract on page 103 of the specification with the following rewritten Abstract on a separate sheet as follows: